

**FACTORS AFFECTING UPTAKE OF PROCESSED CHICKEN MEAT IN NAIROBI
COUNTY: A CASE OF KENCHIC LTD**

BY

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DECLARATION

Declaration by the Student

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than MUA for academic credit.

.....

Signature

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.....

Date

EMBA00014/2/2012

Declaration by the Supervisor

This project has been submitted for examination with my approval as the University Supervisor

.....

Signature

Dr. Paul Kithae

.....

Date

DEDICATION

This research proposal is especially dedicated to my entire family members for their love, encouragement and support throughout my studies.

ACKNOWLEDGEMENT

I most sincerely thank the almighty God for giving me good health to carry out this research. I salute my supervisor Dr. Paul Kithae who devotedly guided and encouraged me through the project. I am convinced that without his support, this study would not have been a success.

Mostly especially, I am grateful to my family members who encouraged me to move on amid challenges and tight schedules. I greatly appreciate the encouragement of my classmates throughout the programme who were always available with useful suggestions.

Lastly but not least, I thank all my friends even though they are not mentioned as individuals. I appreciate the contribution and supports towards making this study a success.

ABSTRACT

The preference and consumption of chicken meat can be considered as a universal phenomenon and chicken meat is greatly accepted by consumers worldwide as compared to the other meat consumption. According to Borchert (1998); chicken meat is one of the most consumed food in the world amongst the urban and rural residents. The consumption of processed chicken has reduced and this has necessitated a study on factors affecting the uptake of processed chicken. This study was done using a case study of Kenchic Ltd which is one of the leading producer of processed chicken in East Africa. Chapter 2 provided literature review from related studies, a theoretical review of this study and a review of empirical studies on factors affecting uptake of processed chicken which include supplies, price, income, culture and traditional believes. The conceptual framework on the factors included in our study was also analysed. The study used descriptive research design to establish factors that affect uptake of processed chicken meat in Kenya. Stratified random sampling technique was employed to select a sample of 72 respondents (40%) from kenchic Ltd , Hotel and Processing Section in Nairobi County, as they are in a good position to give the information required for our study. According to Mugenda and Mugenda (2003) a sample of 30% and above is considered representative for a population less than 500. A sample of 40% was used and justified since it minimized the duplicity and redundancy of the data obtained and the size was large enough to ensure collection of comprehensive data. Data was collected from the field and the results were presented in tables, figures and content delivery to highlight the major findings. They were also presented sequentially according to the research questions of the study. Mean scores and standard deviations analyses were used to analyse the data collected. The raw data was coded, evaluated and tabulated to depict clearly the factors affecting uptake of processed chicken. The findings indicate that the rapid growth of population, requirement of quality and quantity assurance in food supply, need for protein of animal origin, increasing consumer awareness and preferences in terms of healthy and balanced nutrition have brought the processed meat sector to the situation of a large industry having a significant place in urban areas in Kenya. Factors such as price of processed chicken, supply, income and culture have been identified as the factors affecting the demand of processed chicken meat

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ABBREVIATIONS

MEC	Means End Chain
NAFTA	North American Free Trade Agreement
SSA	Sub Saharan Africa
USA	United States Of America

OPERATIONAL DEFINITION OF TERMS

Consumer - A person, group of people or organisation who take processed chicken

Consumption – The uptake of processed chicken

Processed chicken – Mechanically separated chicken and other chicken products which are produced through processing the chicken meat like sausages and chicken nuggets.

Production - the act of making the processed products

Behaviour – the actions or mannerisms in which the consumer decide to consume processed chicken

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter presents the introduction to the study whose main objective is to examine on the factors affecting uptake of processed chicken meat in Nairobi County. The chapter is organized into background of the study, statement of the problem, research objectives, research questions, significance of the study, limitations of the study and the scope of the study.

1.2 Background of the Study

The processing of poultry began in the late 1950s in the U.S.A, but for different reasons. The consumer preference for chicken cuts instead of whole chicken and, later on, the demand for chicken fillets and convenience products, such as nuggets, hamburgers and marinated cuts, required the finding of ways to use backs, necks, and bones left overs from manual deboning processes. These parts make up about 24% of the edible part. From there on, the processing by mechanically separating meat of poultry became available and started to be used in the manufacture of several products, such as sausages, bolognas, salamis and dry soups (Bilgili, 2002)

The preference and consumption of chicken meat can be considered as a universal phenomenon and chicken meat is greatly accepted by consumers worldwide as compared to the other meat consumption. According to Borchert (1998); chicken meat is one of the most consumed food in worldwide amongst the urban and rural residents. The increase of chicken meat consumption is due to the versatility of the meat, relatively low cost in comparison to other meat, the acceptance of the chicken meat to all religions and increase in the household income. Nestle (1999) indicated that meat consumption is viewed as a reflection of favorable economic conditions.

The growth in consumption especially for processed chicken is to some extent, attributed to its perception as a healthy alternative to redmeats besides the low retail prices and ease of preparation. The overall growth in demand for poultry meat would be much accelerated by the surge in human population, rise in incomes, and urbanization. This implies that the rural poor and landless in the developing countries are bound to benefit from the expanded

livestock markets and improved household food security, thus alleviating the prevalent protein and micronutrient deficiencies (Nestle, 1999).

The poultry sector in Africa largely dominated by chickens has grown rapidly over the years although its future remains uncertain. In spite of that, chicken meat consumption has continuously expanded especially in the sub-Saharan Africa (SSA). The projected consumption for meat as a whole is expected to be more than double between 1997 and 2005 from 5.5 to 13.3 million metric tonnes in Africa. This increase is partly linked to what is referred to as the “Livestock Revolution”. However, the overall annual per capita meat consumption is expected at an average of 44 kg or a total consumption of 326 million metric tonnes of meat in the developing countries by the year 2050 . Moreover, poultry will account for about 40 percent of the global increase in demand for meat by the year 2020, showing a shift in taste from red meat to chicken. The domestic consumption of meat has increased tremendously from 361,115 tonnes in 1991 to 606,169 tonnes in 2007. The per capita consumption of meat was 14.90 Kg in 1991 and rose to 16 Kg in 2007. FAO projected a per capita consumption of 22 kg by the year 2050 on average for the SSA (Ajayi, 2010).

World chicken meat production quantities have rose from 58.9 million tons in 2000 to 74.2 million tons in 2007, which means more than a quarter percentage (25.9 %) increase during this period (Anonymous, 2009). Trend for World chicken meat production during 1990-2007 years period (31.87+2.42 in terms of million tons) showed that the average yearly increase was 2.42 million tons. According to 2007 data, U.S, China and Brazil are the major producers of chicken meat with 21.7 %, 14.6 % and 11.9 %, respectively. These three countries represent nearly half of (48.2 %) total World chicken meat production. In spite of its low percentage in total World chicken meat production (1.3 % in 2007), Turkey still ranks in 14th place (Chamul, R. 2007.).

The proportion of World chicken meat in total meat production rose from 13.6 % in 1970 to 24.2 % in 2004. The protein deficiency stemmed from cattle meat decreases have to some extent been met by increases in chicken meat. World poultry meat consumption quantities rose from 40.29 million tons in 1990 to 74.77 million tons in 2003, which means the yearly average increase was 2.74 million tons during the period. (Ollinger, MacDonald, and M. Madison, 2000.) The per capita poultry meat consumption of U.S was 50 kg in 2003. This figure is comparatively high compared to that of European Countries, which ranged between

9 kg for Netherlands and 30 kg for Spain as well as that of 12 kg recorded for Turkey (Anonymous, 2009). Israel and Brazil are among the highest poultry meat consumption in terms of per capita with 54.3 kg (in 2005) and 33 kg (in 2003) . Factors such as consciousness of consumers on the nutritional and health value of chicken meat (Rankin, 2000); income level of households: the prices of meats substitute for chicken meat (Oliphant, 1997), population growth increases the absence of religious obstacles (Oliphant, 1997) and tastiness may be effective on the increase of poultry consumption.

1.2.1 History of poultry

Pigeons, ducks, and geese were bred in China more than 3,000 years ago. Chickens, developed from Asian jungle fowl, were domesticated probably about the same time. In the sixteenth century, chickens were introduced into America from Europe and turkeys were introduced into Europe from America. Although poultry eggs were artificially incubated in ancient China and Egypt, this method of hatching poultry was not used on a commercial scale until the 1870s. The modern poultry industry emerged in the late nineteenth century in Europe and America as breeders focused on improving meat and egg production. Research and technical innovations in poultry housing, feeding, and breeding have led to the rapid development of the industry since the 1930s. Production and consumption of poultry products increased significantly during World War II when beef and pork were in limited supply. Since 1945, improved methods of storing and distributing poultry meat and eggs have helped stimulate consumption of these foods. Specialization in raising broilers has been important to the expansion of the poultry industry. The current integrated poultry production system evolved from the many small, independent farms and companies that existed around the 1940s as hatcheries, feed mills and processing plants and then over the ensuing years integrated under a single ownership. In North America, the integration process was nearly completed by 1970 (Catley, 2008).

The poultry industry is rapidly becoming global. A growing percentage of the U.S. poultry industry revenues come from exports of poultry products, particularly the ones such as dark meat and feet that do not have strong markets in the U.S. As a result, the industry in the U.S. has become keenly aware of the politics and economics of its major customer countries; Russia, Hong Kong/China, Japan, Canada, and Mexico. Although the U.S. is the world leader in poultry production, its industry is still concerned about conditions and any developments in poultry-producing nations with which it competes. Examples of important, competitive

advantages in other producer countries include the large grain production in Brazil and the massive potential consumer market developing in China. In an effort to capitalize on some of the production and marketing advantages in various parts of the world, poultry companies based in the U.S. and other countries are establishing production operations in other regions of the world. Another emerging factor in the global marketplace is the development of trading blocks such as the North American Free Trade Agreement (NAFTA), the European Union, and South America's Mercosul. These alliances reduce or eliminate trade tariffs between member nations, standardize many requirements, and regulate trade within and outside of the alliances (Costales, 2007).

Economic production through vertical integration, favorable meat characteristics, and product innovations to meet consumer needs have all contributed to the poultry industry's success. However, the safety of poultry products and the use of water in processing are two issues with which the industry is concerned. Developments in live bird production, processing plant operations, product characteristics, and inspection systems are all being made to reduce bacterial contamination on the product and improve the product's safety. Likewise, the expense and environmental impact of using large quantities of water in processing and then cleaning that water before discharging it have all prompted intense study in these areas. The following chapters will provide the reader with an understanding of these and the many other areas involved in poultry meat processing (Hazell, 2007).

1.2.2 Poultry industry in Kenya

In the case of Kenya, the country has experienced rapid economic growth over the past few decades which contributed significantly to the changes of food habits and food consumption patterns. According to Ajayi (2010), the population of Kenya consists of many ethnic groups with diverse religions and beliefs; therefore food consumption differs from one religion to another. Meat consumption in particular is determined by the religions where pork is forbidden to Muslims and beef is prohibited to Hindus, which makes poultry meat highly consumed due to its religious acceptance amongst the meat commodities. Poultry production and consumption in Kenya is projected to increase by 24% in 2013. This is due to the increased demand from consumers with higher incomes and the perceptions that poultry meat is healthier than other meats. Despite the growth of chicken meat consumption in Kenya, there is a lack of research identifying factors affecting the uptake of processed chicken meat in Nairobi County.

1.2.3 Kenchic Ltd

Kenchic was established in the 1960s by the Kenyan government to start a large scale poultry industry and to support local poultry farmers. In 1972, British American Tobacco (BAT), took it over from the government and in 1983 it was acquired privately from BAT, creating Kenchic Limited. Kenchic now imports layer parent stock from Europe and rears them to produce commercial layer chicks. From the parent stock, the company currently has a production capacity of 300,000 broiler chicks per week. These birds are sold into the local market through the company's own depots or agents, while some are grown through a contract scheme and bought back for processing. The birds are processed into different products including whole birds, cut-ups, chicken sausages and chicken burgers. Kenchic is the largest poultry business in Kenya, processing and distributing over 100,000kg of chicken every week to supermarkets, hotels, butcheries and the 33 franchise Kenchic Inn fast-food chains. The post-election violence at the beginning of 2008, bird flu scares and the global recession resulted in profound changes in the Kenyan business environment. Such challenging situations resulted in Kenchic looking to take on a more proactive way of doing business, subsequently the formulation of a strategic plan for the period 2009-2012 was created to address current issues and enable the company to look ahead to the future with a greater focus (Ajayi, 2010)

1.3 Problem statement

Higher income, urbanization, other demographic shifts, improved transportation, and consumer perceptions regarding quality and safety are changing global food consumption patterns. Shifts in food consumption have led to increased trade and changes in the composition of world agricultural trade. Given different diets, food expenditure and food budget responses to income and price changes vary between developing and developed countries. In developing countries, higher income results in increased demand for meat products, often leading to increased import of livestock feed. Diet diversification and increasing demand for better quality and laborsaving products have increased imports of high-value and processed food products in developed countries. Consumer groups in developed countries have also brought attention to organic production of food and the topic of animal welfare. (Trindade,2004) One way in which the public and private sectors have

responded to consumer demand for these quality attributes has been by developing and implementing mandatory and voluntary quality control, management, and assurance schemes.

Urbanization has played a significant role in changing global food consumption patterns. Given different lifestyles of urban and rural residents, greater demand for urban residents' time, increased food availability, and higher purchasing power in urban areas, urban and rural diets tend to differ significantly. Since the urban population in developing countries is expected to double to nearly 4 billion by 2020, urbanization is a phenomenon that will in the future primarily affect developing countries. With increased urbanization and higher disposable income among urban residents, the demand for meat, horticultural, and processed products is expected to increase among developing countries. Increased demand for meat is expected to result in increased demand for feed grains and protein meals as well, resulting in greater trade in these products (Ostovar, 1971).

The demand and consumption of processed chicken has reduced. A current study on factors that affect the uptake of processed chicken has not been done yet the demand has greatly reduced. Our study was necessitated due to lack of such information which is vital. Our study will identify the factors that could be affecting the uptake of chicken. The study was done in Nairobi area, which is one of the counties leading in supply of the processed chicken.

1.3.1 General Objective

The general objective of this study is to analyze factors affecting the uptake of Processed Chicken in Nairobi County.

1.3.2 Specific Objectives

- 1) To establish the effects of supply patterns of processed chicken on its uptake in Nairobi county
- 2) To ascertain the impact of price of other meats on processed chicken uptake in Nairobi county
- 3) To investigate the effects of cultural and traditional believes on processed chicken uptake in Nairobi county
- 4) To determine the extent to which house hold income levels affects uptake of processed chicken in Nairobi county

1.4 Research Questions

- 1) To what extent does the supply pattern of processed chicken affect the uptake of processed chicken in Nairobi County?
- 2) How does the price of substitute meats to chicken affect the uptake of processed chicken in Nairobi County?
- 3) How does cultural and traditional beliefs affect uptake of processed chicken in Nairobi County?
- 4) To what extent does household income level affect the uptake of processed chicken in Nairobi County?

1.5 Significance of the Study

Findings of this research will be of importance to the following:

1.5.1 Manufacturers

The findings would be of special importance and use to the manufacturers and industrialists who are already in the business of processing meat as well as those who intend to initiate such enterprises.

1.5.2 Policy Makers

Secondly, the findings would be of immense importance for government policy makers and the ministry of livestock, public and private organizations and agribusiness's concerning the area of study of poultry.

1.5.3 Other Researchers

Last, the findings would provide the background information to be used as basis for further research in the study area.

1.6 Limitations of the Study

The study will be limited to the factors affecting uptake of processed chicken meat and therefore cannot be generalized since there could be other factors affecting the uptake of processed beef or pork meat. Although there are other chicken firms that produce processed chicken our study only focuses on Kenchic Ltd.

1.7 Scope of the study

Our study will cover Kenchic Ltd which is the only licensed export slaughter house in Kenya for poultry products. Kenchic processing plant supplies chicken to international franchises like Galitos, Steers, Kentucky Fried Chicken (KFC) in East Africa, airline caterers like NAS, leading hotels, caterers, and fast food restaurants including all the 30 Kenchic Inns countrywide. Our study will identify factors affecting the uptake of processed chicken in Nairobi firm and therefore will concentrate on Kenchic firm based in Tigoni and the Kenchic hotels in Nairobi the factors identified include income, costs, culture and supply.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides literature review from related studies. Section 2.2 provides a theoretical review of this study. Section 2.3, 2.4, 2.5 and 2.6 provides a review of empirical studies on factors affecting uptake of processed chicken which include supplies, costs, income and culture and tradition. Section 2.7 provides the conceptual framework on the factors included in our study.

2.2 Empirical review

The ingredients added to the food such as herbs and spices contribute to the food quality and varieties of ingredients are widely used by people around the world. Marinating prior to cooking has been used frequently for meat products which bring effects to sensory qualities, nutrient content of meat, yield processing and antimicrobial action (Dong *et al.*, 2011). In the context of chicken meat, it is so versatile and could easily be prepared. Chicken meat can be consumed on its own although some perceived it as tasteless without any mixture of ingredients or may be used as a base ingredient for other dishes (Kennedy *et al.*, 2004). For instance, chicken meat can be used as a pizza topping (Singh and Goyal, 2011). The convenience and versatility of chicken meat can also be enhanced by the wide range of pre-prepared sauces which enables the creation of a different chicken dish each day and this contributes to the high consumption of chicken meat. A taste evaluation is an attribute which is experienced after using the product (Ford *et al.*, 1990). Consumers give priority to food taste as part of the quality (Min and Min, 2011). Glanz *et al.* (1998) indicate that taste is the most important influencing factor in food choices, followed by price. In the context of chicken meat, it is preferred over mutton or beef because of its great taste. Consumers look for important quality aspects of meat such as the good and tender taste, juicy, fresh, lean, healthy and nutritious (Grunert, 1997). While mutton has lesser consumption due to its strong smell and harder meat, chicken meat on the other hand has tender and a soft texture. It is also known that consumers prefer food which is tastier and easily available. Freshness also plays an important role in determining consumers' selection of meat. The rise in the habit of purchasing and cooking chicken meat is not only observed in Malaysia, but it is true in other countries. In Ethiopia, the religious festivals periodically shifted local demand and prices of poultry (Aklilu *et al.*, 2007). Chicken meat is also served during Christmas festival and one of

the unique dishes served in India during this season is chicken Manchuria (Rao *et al.*, 2005). According to Henning *et al.* (2006), at the time of major festivals, chickens are in demand, hence higher prices have to be paid by the middlemen to the farmers in Myanmar in order to fulfill the demand. According to Guerrero-Legarreta and Hui (2010), chicken meat remains as the most available and cheapest source of animal protein as compared with beef, pork and mutton. Demand for chicken meat is also increasing especially for the food-service industry, institutional and fast-food sectors. These demands are not only for fresh chicken meat but also for products such as frozen chicken meals, precooked meals and chicken burgers. Besides, poultry cuts are sold directly to markets, hotels, restaurants and supermarkets as it is the cheapest protein source. The rise in the habit of purchasing and cooking chicken meat is not only observed in Kenya, but it is true in other countries. In Ethiopia, the religious festivals periodically shifted local demand and prices of poultry (Aklilu *et al.*, 2007). Chicken meat is also served during Christmas festival and one of the unique dishes served in India during this season is chicken Manchuria (Rao *et al.*, 2005). The rise in chicken meat demand is also observed in Myanmar during festive seasons. According to Henning *et al.* (2006), at the time of major festivals, chickens are in demand, hence higher prices have to be paid by the middlemen to the farmers in Myanmar in order to fulfill the demand. According to Guerrero-Legarreta and Hui (2010), chicken meat remains as the most available and cheapest source of animal protein as compared with beef, pork and mutton. Demand for chicken meat is also increasing especially for the food-service industry, institutional and fast-food sectors. These demands are not only for fresh chicken meat but also for products such as frozen chicken meals, precooked meals and chicken burgers. Besides, poultry cuts are sold directly to markets, hotels, restaurants and supermarkets as it is the cheapest protein source.

Maintaining good health throughout the entire Lifecycle of human being is partly driven by healthy diet and nutrition. Both Bansback (1995) and Becker *et al.* (2000) have noted that reducing the impact of price on meat consumption behavior and suggested that health, convenience and quality issues are more important and influencing on behavior. However, not the entire world population is fortunate to be consuming healthy food. Poverty and injustice are the root causes of malnutrition (WHO, 2003). The food consumption of higher income population varies in animal proteins and fats, which include poultry, meat and dairy products. Poultry consumption is the fastest to grow. According to FAS (2001), poultry meats increasingly in demand in developing countries because of its lower price and consumer's perception of healthy and safe as compared to other meat. Consumers in developed countries

such as America are consuming a lesser amount of red meat such as beef and more non-red meats such as poultry meat (Rimal, 2002). According to Slattery *et al.* (1998), consumer replaced red meat with poultry to reduce risk for colon cancer aside from other food substitutions. A preference study for different items of meat among university students in northern Poland proven that chicken ranked as the highest since young adults preferred low-fat meat (Babicz-Zielinska, 1999). However, there are side effects of consuming too much chicken and chicken is already known to have its own diseases such as Avian Coccidiosis, Marek's disease, fowl typhoid, Newcastle disease and fowl coryz (Mwale *et al.*, 2005). The usage of antibiotic in food-producing animals contributes to human drug resistance and this caused mixture responds from the scientific community, animal health experts and consumer advocates as to whether it brings benefits to the human society (FMI, 2011). The chicken meat's vulnerability to bacterial infections such as Salmonella enteric could cause Gastroenteritis or gastric flu to human. Fearnley *et al.* (2011) conducted a study in South Australia on 94 human cases which resulted in the Salmonella infection outbreak is linked to food containing chicken meat and eggs. Preserving chicken meat for long days would lead to health issues as well. It could destroy the natural nutrients of the food and would provide negative flavors to the food which in turn will create health hazards.

2.3 Theoretical Review

Two theories have been identified and found to be relevant to the factors affecting uptake of processed chicken meat. These theories are discussed below:

2.3.1 Economic theory of consumer behavior

Economic theory has shown some limits in explaining the complexity and multidimensionality of consumer behaviour. These limits not only relate to the assumption of consumer rationality (i.e. utility maximizing behaviour) and perfect information. Most economic models use relative prices and disposable income/budget as explanatory variables of consumer behaviour and treat all other influences (e.g. social, economic and cultural factors) as latent or unobservable variables: quality perception is one of them. Deaton and Muellbauer (1980), for example, discuss consumer behaviour in terms of preferences and opportunities for choice: unlike preferences, the opportunities for choice are often directly observable so that, to the extent that variations in behaviour can be traced to variations in opportunities, we have a straightforward and objective explanation of observed phenomena''. In their view, therefore, much can be so explained, and the part played by preferences in

determining behaviour tends to be overestimated'' In marketing, however, the analysis of consumer behaviour is dealing primarily with preferences and how preferences are formed in the mind of the consumer. Marketing approaches to consumer behaviour may be distinguished as cognitive versus behavioural. Cognitive approaches emphasise constructs dealing with mental structures and thinking processes; behavioural approaches emphasize direct links between the characteristics of the environment and behaviour. Both approaches are widely accepted and acknowledged ways of analyzing behaviour, with a high degree of complementarity (Aberle *et al.*, 2001).

Cognition refers to the dynamic mental constructs and processes involved in thinking, understanding and interpreting stimuli and events from the environment. It includes the knowledge, meaning and beliefs that consumers have developed from their experience and stored in their memories (Alvarado & Owens. 2006.). While many aspects of cognition are conscious thinking processes, others are essentially automatic. In other words, consumer behaviour does not imply only reasoned action but it is essentially a consequence of consumption-relevant cognitive structure (Grunert and Grunert, 1995). When a stimulus or event regarding a product, including new product information, comes in relation with consumer self-knowledge and his memory, a link between him and the product is built. A network of links between product attributes, personal consequences and values can be revealed to give deeper insight into consumer motivation. These links build up those elements of the cognitive network that the consumer raises in his mind when presented with product information in the form of product attributes: when this network is structured in a hierarchical form is known as a ``means-end chain'' (Smith and Swinyard, 1999).

A means-end chain (MEC) is a knowledge structure that links consumers' knowledge about product attributes with their personal knowledge about consequences and values. The means-end approach suggests that consumers think about product characteristics or attributes in terms of personal consequences. These may be perceived as positive (benefits) or negative (risks). In other words, the meansend chain model gives the possibility to explicitly link consumers' needs and product characteristics, and reveals his goals/motivations in purchasing a product. In means-end chain theory consumer decision making is considered like a problem-solving process. Consumers exert a behaviour (as an example, acquire a credit card), as a means to reach an objective or an end (e.g. not to pay cash) Besides, consumers also see most product attributes as a means to some end: at the conscious level this may be

represented by some positive consequences, at a more abstract and subconscious level their end is to attain values, that is preferred end states of being and preferred modes of behavior (Peter *et al.*, 1999).

In order to understand why customers are interested in purchasing a product, it is necessary to understand the nature of this finalised decisional process and, therefore, of what they want or try to achieve through the purchase (Smith and Swinyard, 1999). The actual motivations of product consumption can hardly be found by just asking straightforwardly to the consumer ``Why?``, since in most cases he is not aware of his decision-making process, neither he is able directly to reveal his personal reasons for purchase.

2.3.2 Decision making theory

Consumer decision making is often complicated and may involve a number of constructs. Several perspectives on consumer decision making have been considered in the literature. Some researchers have suggested that consumers are ‘value-driven’ (Nestle, 1999)). A consumer’s perceived value may be seen as an expression of “an overall assessment of the utility of a product (or service) based on perceptions of what is received and what is given” (Zeithaml, 1988). Other researchers (Celsi & Olson, 1988; Petty & Cacioppo, 1983, 1986; Blackwell et al., 2001) have emphasized the role of involvement in explaining how likely consumers are to process e.g. cognitive information (Candel, (2001) and to engage in extensive evaluations of attributes and products. Low involved consumers may use simple decision rules in arriving at attitudinal judgments. For instance, according to ‘cue utilization theory’ (Zeithaml, 1988), consumers may simply use one or more indicators (e.g. price) of the quality or the overall performance of a product. The behaviour of high involved consumers may be analyzed and described on the basis of the information processing perspective. According to the information processing perspective (Østergaard & Jantzen, 2000) the interaction between the consumer and stimuli in the environment is an ongoing cognitive process in which the consumer develops beliefs and attitudes towards the environment. The information processing perspective presupposes that the consumer, in order to avoid cognitive dissonance, seeks an equilibrium in which there is balance between the consumer’s attitudes and beliefs and the actual environment (Østergaard & Jantzen, 2000). In contrast to the information processing perspective, other researchers propose that consumer affections like emotional responses should be included in the explanation of consumer decision making. The consumer looks for new experiences via consumption. In this

connection, the primary purpose is not to evaluate relations between attitude, beliefs, and the environment, but to fulfill a desire and to obtain pleasure in life.

The various perspectives on consumer decision making differ on several important dimensions. The value-perspective emphasizes situations in which consumers make value trade-offs, such as price versus quality in purchasing a food product. The construction of such trade-offs may, however, be difficult and may involve uncertainties. For example, the consumer does not always have a clear picture of the quality of a food product that is offered in a supermarket. This problem of uncertainty is not explicitly dealt with within the value perspective, which does not include suggestions on how consumers will reduce the risk that follows from not knowing the outcome (e.g., the quality of a food product) or the negative consequences (e.g., will a low quality food product harm my health?) of carrying out a certain decision. Cue utilization theory, on the other hand, suggests that consumers may try to reduce risk by using cues (e.g., price, brand name, advertising, color, etc.) as indicators of the quality of a product or service. Thus, the reliance of one or more cues is one risk reduction strategy. Based on an extensive literature review Caswell, & Bredahl (1998) conclude that cues mostly serve as heuristics in assessing product quality when (among other factors) there is a need to reduce the perceived risk of purchase and when consumer involvement is low. From an information processing perspective a product can be conceived as an array of cues (Hooker, 1998), where cues can be regarded as 'pieces of information'. When the consumer is highly involved in the decision making he or she can be expected to engage in a more extensive internal and/or external information search for the purpose of reducing the risk of making a 'wrong' choice. Thus, such a consumer will have a high degree of cognitive activity and will make strong efforts in conducting evaluations and comparisons of products reaching for a reasoned decision. As in the value perspective (in which a perceived poor quality can be 'compensated' by a low price) consumers can make 'trade-offs' between various attributes (compensatory decision making) or the consumer can decide that one or more attribute must be represented in the product on a certain level (non-compensatory decision making). However, from an emotional perspective consumers do not make cognitive (compensatory or non-compensatory) evaluations when considering purchasing a product. Emotions should not be regarded as the result of an evaluation procedure but as an affective response to consumers' perceptions of stimuli in the environment (Bagozzi et al., 1999).

2.4 Cost

According to the past research findings, consumers find that it is worth of value to buy processed food due to its unique attributes (Yiridoe et al, 2005). As we all know processed foods cost more in the market and common publics may find it non economical to pay the higher price as their daily food consume. Not unless and until people perceive the unique characteristics of processed food can bring various benefits to them, they will not view processed food as an exorbitant range food. The price differential would be viewed to reflect the product quality we get during the purchase and there is no such thing called good and cheap food (Caswell, & Bredahl, 1998)). As the saying goes, “we get what we pay for”. Consumers put less importance to the price when they shop for processed food at the supermarket because the foods are looking fresh and safe to consume and hence have high confidence in them. Chantylew and Belete(1997), stated that price is not the main factor affecting consumers’ decision to buy processed food so long those foods are able to provide good value to them as compared to the non-o processed food.

Analysis of prices indicates that whole chicken, which is the least processed of all slaughtered cuts, is the most expensive. Likewise, buying chicken cuts decreases price. Industrial and crossbred chickens are rarely purchased live, but purchase of live backyard chickens appears to significantly lower the price. Although slaughter costs are reflected in prices, whole chicken is more valuable than chicken parts. According to Chantylew and Belete(1997, Wealth and family structure are not correlated with price, which indicates that chicken is a fairly homogenous product. Otherwise, differentiated meat characteristics marketed toward specific age groups or wealth levels would be reflected in prices.

Processed chicken parts appear to be the least valuable of all forms of chicken being sold, which indicates that households on average have not shifted preferences to more processed chicken. Parker (1994) indicated that although household size and age structure appear not to impact choice of chicken variety—preferences, attitudes, and wealth have a large impact. Households that indicate a greater concern for taste are more likely to purchase backyard chicken, and less likely to purchase industrial chicken. Households that report being concerned about prices are more likely to purchase industrial and crossbred chicken, and less likely to purchase backyard chicken. households, on average, clearly prefer backyard chicken as long as they can afford it.

2.5 Supply

Consumers now demand greater food variety and the availability of these foods year round. Technological innovations, as well as improved information and transportation technologies, have significantly changed the way food is produced, processed, transported and delivered to consumers. The “new supply economy” incorporates information, production and distribution technologies that have reorganized distribution channels (Gueye, 2003). New technologies allow increased integration of various market activities and increased use of private contracting in global supply networks. Buyers are now associated with large retail processed food networks, where reputation, quality and delivery are important attributes of the transactions. A leading force in

While they benefit from the convenience, variety and low prices achieved through large-scale production and distribution channels, consumers also demand assurance of quality. Larger, more coordinated networks enable food retailers to track food inputs through supply networks and demand products with more specific attributes. In such systems, retailer and brand name offer assurance to consumers of attributes that are difficult to observe or measure. Even consumer preferences for foods viewed to promote health or environmental benefits, including processed, and “natural” products, benefit from food systems with tighter control and traceability. (Frewer, & Howard, 1995)

The law of supply states that there is a positive relationship between the price of a good and the quantity of it that producers will supply. Business firms and other producers purchase resources and combine them into goods and services. The resources have alternative uses so producers will have to pay resource owners a price sufficient to attract them from other potential users. Thus, product suppliers will incur costs as they purchase resources. Producers are in business to make a profit. In order to do so, they will have to supply products that can be sold for a price that is greater than the costs of the resources required for their production. As product prices increase, suppliers will find it profitable to supply more and more units. This accounts for the direct relationship between the price of a product and the quantity supplied by producers (Worsley, 2001).

2.6 Income

At higher income levels, consumers begin to use their money to purchase products that satisfy preferences above and beyond basic nutritional needs, such as better taste, variety and convenience. For example, developing countries increase processed chicken meat demand as the economy improves. Once needs lower on the food pyramid have been met, consumers at higher income levels want expanded information about their food, and how food products affect health and lifestyle. High-income consumers also begin to be concerned about the impact that individual food consumption decisions and choices have on other people, the environment and animals. Thus, as incomes increase, the demand for food products with different characteristics evolves, presenting both opportunities and threats to existing and potential food producers. Higher income consumers provide opportunities for niche producers that are willing and able to produce to this diverse set of standards (see Economics of Production, Processing and Marketing Chapter). However, low to moderate-income families in developed countries and people in developing economies still demand an increasing amount of affordable animal proteins. (McCarthy, 2004)

The market for processed foods has grown rapidly in the past decade as they have become increasingly affordable and available in the market. A widely held belief in the processed foods trade circle is that price and income do not necessarily track organic sales (Worsley, 2001). Lack of influence exerted by price and income on organic purchases appears to contradict each other. In the early development of the processed foods market, processed foods sales concentrated in markets, such as natural and specialty food stores, which serve affluent consumers. Affluent consumers may place a high value on the health and environmental benefits of processed foods and hence may be willing to pay the premium price does not matter but income does. processed foods seep into mainstream supermarkets, they become available to a much larger consumer base of less affluent, price conscious customers.

As a result of the phenomenal growth in the processed foods sector during the past decade, the roles of price and income in processed foods sales may have evolved. In America for example, a traditional and popular perception suggests that most processed foods consumers are white, female, young, wealthy, and well-educated. According to Hartman Group (2002), half of those who purchase processed foods frequently have income below \$50,000 and that

African Americans, Asian Americans, and Hispanics purchase more organic products than Caucasians. Similarly, more recent studies (Jayachandran & Variyan, 2003) also report that non Caucasian Americans are more likely to be processed foods purchasers.

Although many studies find that higher income households are more likely to purchase processed foods products others have shown that income is uncorrelated with processed foods purchase behavior . These results appear inconsistent and perhaps counterintuitive. However, it is also possible that the profile of processed foods consumers may have changed over time, reflecting the dynamic nature of the processed foods industry.

2.7 Cultural/traditional beliefs

Culturally, meat is associated with wealth and consumption is viewed as a reflection of favourable economic conditions (Nestle, 1999). Recently, red meat consumption has fallen in response to food scares, the Bovine Spongiform Encephalopathy (BSE) debacle and the initial banning and subsequent authorisation of beef exports, the foot and mouth crisis, general health concerns and putative links to bowel cancer (Bingham, 1996; DOH, 1998; FSA, 2002a; WCRF, 1997). Reduction in red meat consumption, however, is not a recent phenomenon, but reflects an historic trend owing much to industrialised farming which has made cheaper, more efficient production of other animal proteins such as poultry and fish, available on an large scale ((Worsley, (2001). As a result, poultry has overtaken red meat as the most commonly purchased meat for the home Chicken meat was perceived as a “feminine” food, and this view was expressed by both genders. Males themselves evidently perceived red meat as masculine by describing it as a more “macho” food. Whereas red meat was perceived by females to be “stodgy” and “heavy”, chicken meat was perceived to be “light” and “fresh”, a perception that may reflect the health beliefs and attitudes of females and concern over body weight. Nishibori, (2009) has suggested that the terms “virtuous” and “robust” reflect the attitudes of women and men, respectively, towards nutritional beliefs and choices.

Consistent with this idea, the issue of gender, as alluded to earlier, appeared to be tied in with notions of healthfulness. These findings compare well with those which have indicated earlier that women are more health conscious than men (Fagerli and Wandel, 1999; Lea and Worsley, 2001) and that women view chicken more positively than red meat (Kubberød et al., 2002). Earlier, it has been suggested that issues of social identity are tied in with healthier

diet choices (Falmoir et al., 2000). This dialogue implies that perceptions of gender, which contribute to social identity, are associated with chicken meat choice and consumption.

2.7.1 Perception

In cultural terms, whole chicken has been associated with “traditional” food culture. Research exploring consumer perceptions of meat (Holm and Møhls, 2000), discussants in this study perceived their own diet to be “modern” and therefore, for them, whole chicken was traditional and reminiscent of childhood. A preference was expressed for buying meat in portions, particularly in fillets, with no bones or skin. Chicken breasts were favoured because they were not evidently or obviously part of an animal. Chicken fillet breasts were the preferred cut of chicken and were perceived to offer both convenience and versatility. Chicken fillets were perceived to be more convenient than whole chicken, as extensive cooking was not required. This reflects Candel’s (2001) criteria for convenience foods that they should not only be time saving but also energy saving. It has often been suggested that consumers, particularly younger consumers (as in this study), lack cooking skills (Caraher et al., 1999; Furey, 2000; Mitchell, 1999). The use of chicken portions/pieces in dishes simplifies meal preparation and may help to overcome lack of skills. Consumers in the present study preferred not to consider how animals were reared or indeed what they were fed. This tendency to perceive meat as disconnected from its animal origin is consistent with the previous observations (Holm and Møhl, 2000; Kubberød et al., 2002). These findings are borne out by the current move away from whole to portioned chicken products for use as fresh or in further processing by consumers (Mintel, 2002).

Chicken meat was also perceived as having “added value” in terms of health, being low in fat, in minimising waste and in terms of convenience. Compared to other meat types, chicken was perceived as healthier in terms of fat content. Chicken, and in particular chicken breast fillets, was perceived as a lean, low-fat food. It was felt that by purchasing chicken raw, leanness could be assessed and any skin or extraneous fat removed prior to cooking. Chicken consumption also appeared to be motivated by a perceived need for weight loss and the discussants’ need to be seen as both fit, lean and healthy. Verbeke and Vaine (1999) also noted that the success of increased poultry meat consumption appears to be determined by its health image.

Different cultures may encourage or frown upon consumption of different foods by

individuals who belong to their groups. Also the consumption of different foods at different stages of life may be actively encouraged or discouraged. This is due to the benefits and dangers of consuming these foods at certain times of life and in certain conditions

27.2 Religion

Religion plays one of the most influential roles in the choices and subsequent selection of foods consumed in certain societies. For example, in the Hindu and Buddhist religions the consumption of both pork and beef is frowned upon. This is because it is considered to not be clean meat. Also ancient Hindu scriptures prohibit the eating of these meats. As a result of this the large majority of Hindus and Buddhists (roughly 90%) have taken this rule to the extreme. They refuse to eat any meat at all and are strict vegetarians, despite being allowed to eat chicken and lamb. Conversely only the consumption of pork and not beef is prohibited for the same reasons in the Islamic religion and Judaism. However all other meats consumed in these religions must be halal and kosher respectively. This means that special prayers are performed in order to make the eating of these animals acceptable. In stark contrast Christianity and the Catholic religion allow the consumption of any types of meat without the need for any kind of repentance to God in the form of prayer. Also at the other extreme to these religions the Jain religion does not allow the eating of any meat and any vegetables grown beneath the soil (Reilly,& Cotter, 2004).

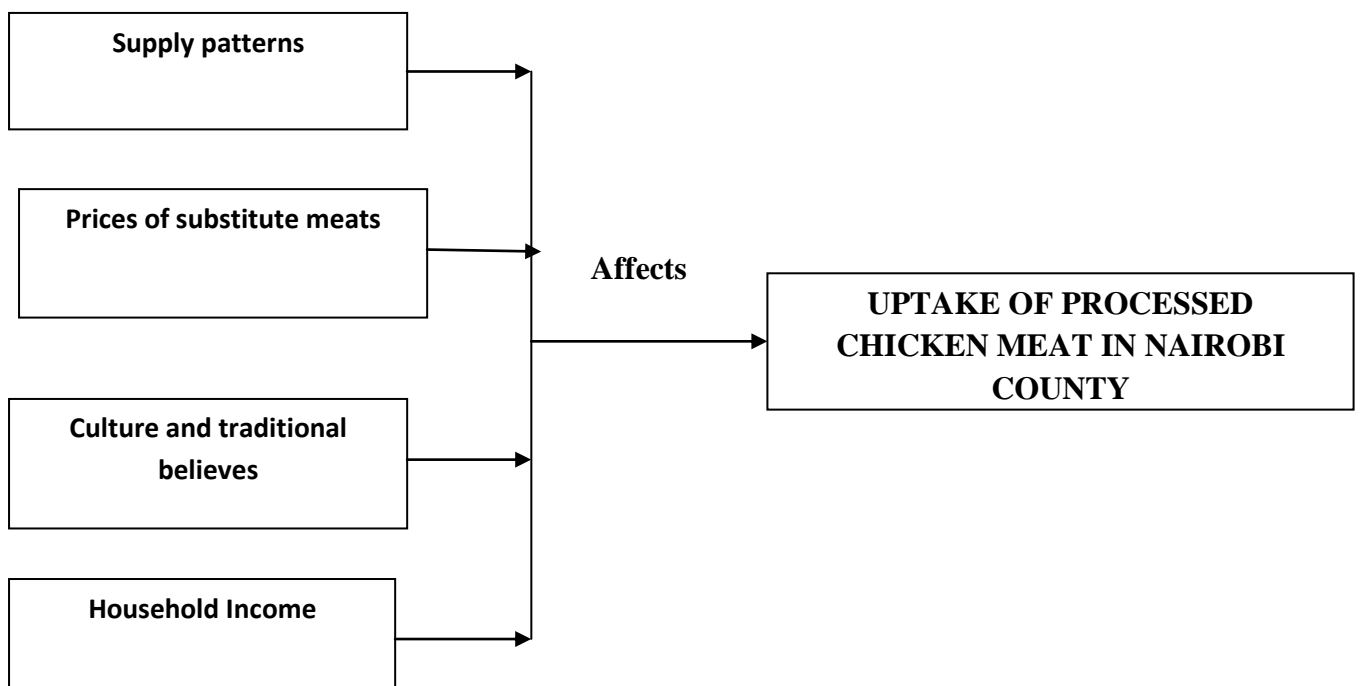
2.7.3 Patterns of eating

We may decide certain personal factors that affect choices and selection of foods. This is because we have an input into these factors, which can influence their outcome. Among these factors are our patterns of eating, which include for whom the food is being made. For example in traditional eastern cultures foods tend to be prepared for a large number of people at regular times of the day. The opposite is true in western cultures, where food is prepared less frequently during the day and often the same meal is eaten more than once during the day. Geographical factors such as where people live and the range of shops situated near them may influence their choice of foods. These factors are usually enforced upon these individuals. For example, some low-income families may live far away from certain shops. These families may not be able to afford a car or to pay regularly for public transport to travel to where more shops are situated. As a result, their food choices will be limited only to local shops, which may have a poor selection of certain foods and even lack other foods. (Cotter, and De Boer, 2004).

2.8 Conceptual Framework

The conceptual framework is a diagrammatical presentation of variables in the study. The framework illustrates the interrelationship between dependent and independent variables. The independent variables for the study are factors affecting uptake of processed chicken in Nairobi. The independent variables are prices of substitute meats, supply, income and culture/tradition.

Figure2.1: Conceptual Framework



Independent Variable

Dependent Variable

Source, researcher (2013)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provided various sections of research methodology. Section 3.2 provided the research design which the researcher used. Section 3.3 provides the target population of study while section 3.4 identified the sampling design and the sample size identified for the research purpose. Section 3.5 captured data collection method. It details the research instrument and data collection method to be used. Section 3.6 Discussed data analysis and 3.7 Data validity and reliability.

3.2 Research Design

The research design that was used in this study was descriptive research design aimed at establishing factors that affect uptake of processed chicken meat in Kenya. According to Mugenda and Mugenda (2003), this design was preferred because it allowed prudent comparison of the research findings. A descriptive research collects data from members of population and helps the research get the descriptive existing phenomena by asking individuals about their perception, attitudes, behavior or values. A descriptive study describes characteristics associated with the subject population.

3.3 Target Population

Hair, (2003) defines population as an identifiable total group or aggregation of elements (people) that are of interest to a researcher and pertinent to the specified information problem. This includes defining the population from which our sample is drawn. The target population of this study consisted of 180 employees of the kenchic ltd. Table 3.1 shows the composition of the target population.

Table 3. 1 Target Population

Category of Population	Population size
Senior management	10
Processing section	70
Hotel sector	100
Total	180

3.4 Sampling Design and Sample Size

A sample is a subsection of population that is chosen in such a way that their characteristics reflect those of a group from which they were chosen (Henn, Weinstein and Ford, 2006). The study used stratified random sampling technique to select a sample of respondents from Kenchic ltd. The hotel staffs were treated as strata and sampling was done proportionate to the number of hotels. The goal of stratified random sampling was to achieve the desired representation from various sub-groups in the population. Mugenda and Mugenda (2003), states that a sample of 30% is considered representative for a population less than 500. The study used a sample size of 40% of the target population since it minimized the duplicity and redundancy of the data to be obtained and the size was large enough to ensure collection of comprehensive data. The table below shows sampling to be done on respective functional categories.

Table 3.2: Sample Population

Category of population	Population size(N)	Sample size (40% of Population) (n)
Senior management	10	4
Processing section	70	28
Hotel sector	100	40
Total	180	72

3.5 Data Collection

The study collected primary data to obtain information on the factors affecting the uptake of processed chicken meat in Nairobi county .

3.5.1 Research Instrument

The study utilized a questionnaire to collect primary data. The questionnaire designed in the study comprised of two sections. The first section (A) included personal information designed to determine fundamental issues including the demographic characteristics of the respondent, while the section B is devoted to information on the factors affecting the uptake of processed chicken meat in Nairobi county

The research instrument consisted of both open ended and closed ended questions. The structured questions was used in an effort to conserve time and money as well as to facilitate

in easier analysis as they are in immediate usable form; while the unstructured questions were used so as to encourage the respondent to give an in-depth and felt response without feeling held back in revealing of any information.

3.5.2 Data Collection Method

The data was collected using a self-administered questionnaire. Nevertheless, where it proved difficult for the respondents to complete the questionnaire immediately, the researcher left it with the respondents and come to pick them up later.

Each questionnaire was coded and only the researcher was able to know which person responded. The coding technique was used for the purpose of matching returned, completed questionnaires with those delivered to the respondents. Secondary data sources was employed through the use of previous documents or materials to supplement the data received from questionnaires and information from interviews.

3.6 Data Analysis

The process of data analysis involved several stages; the completed questionnaires was edited for completeness and consistency, check for errors and omissions and then coded. A content analysis and descriptive analysis was employed. Data was coded and thereafter analyzed using Statistical Package for Social Sciences (SPSS) program and presented using tables and pie charts to give a clear picture of the research findings at a glance.

3.7 Data Validity and Reliability

A research has high validity of the study only if it contains what one wants to study. Validity is sub-divided into three sub-groups : construct, internal and external validity. Construct validity refers to data collection procedure.

Internal validity was achieved through linkage between theory and empirical research. External validity was achieved through the application of the domain of study being generalized.

Data reliability refers to the extent to which the data collection techniques or analysis procedures will yield consistent findings (saunders et al, 2009). Data was analysed and interpreted based on theoretical framework and research that is related to empirical evidence.

The degree of accuracy and reliability of data greatly depends on the approach and methods employed during data collection. To ensure accuracy and reliability of data, sufficient time will be allocated to respondents.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter provides an analysis of data collected from the field. The results have been presented in tables, figures and content delivery to highlight the major findings. They are also presented sequentially according to the research questions of the study. Mean scores and standard deviations analyses have been used to analyse the data collected. The raw data was coded, evaluated and tabulated to depict clearly the factors affecting uptake of processed chicken. Questionnaires were distributed to 72 respondents and only 70 were returned fully completed. This constituted a response rate of 97.2%. According to Mugenda Mugenda (1999), a response rate of more than 80% is sufficient enough for the study.

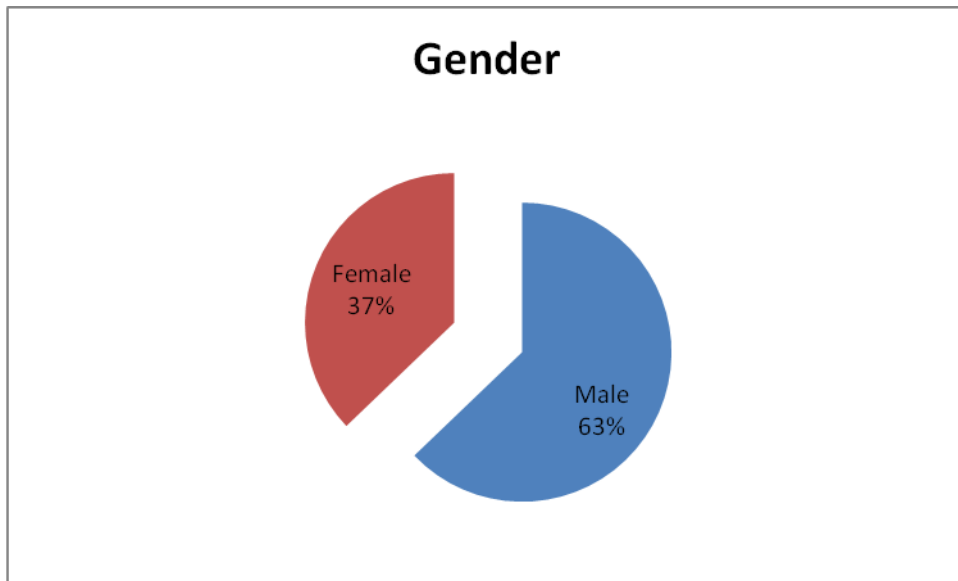
4.2 Demographic Characteristics

The study sought to establish the information on the respondents employed in the study with regards to the gender, age, academic background and duration of service. These bio data points at the respondents' appropriateness in answering the study questions.

4.2.1 Gender

The respondents were asked to show their gender, this was expected to guide the researcher on the conclusions regarding the degree of congruence of responses with the gender characteristics. Figure 4.2 below shows the results of the findings based on the gender analysis.

Figure 4.2: Gender

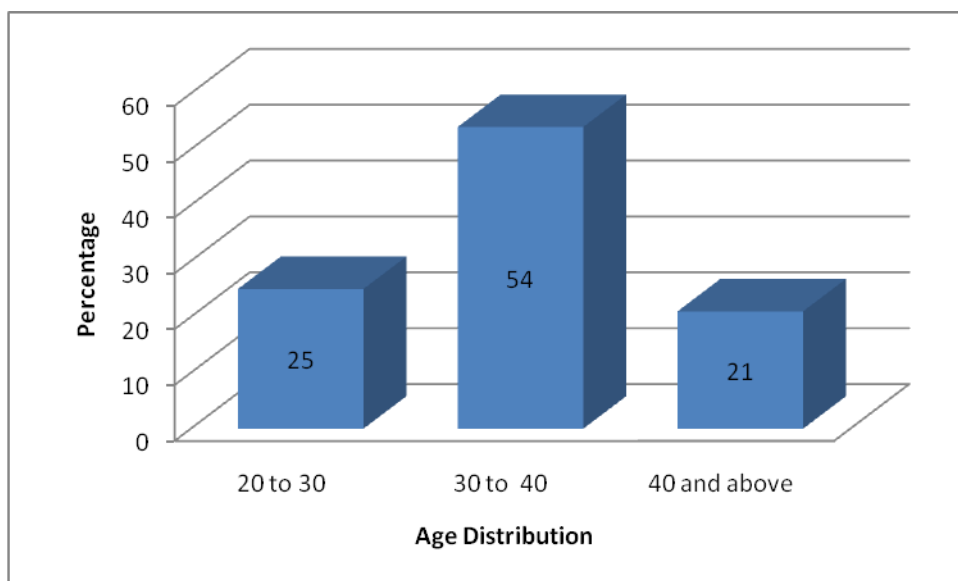


The results as in the figure 4.2 show that majority of the respondent were male at 63% while female was 37% implying that most of the workers were male. This shows that majority of the workers in the chicken processing firm were male.

4.2.2 Distribution of Age Group

The respondents were asked to disclose their age. The figure 4.3 below shows the study finding on the distribution of age of respondents.

Figure4.3: Distribution of Age Group

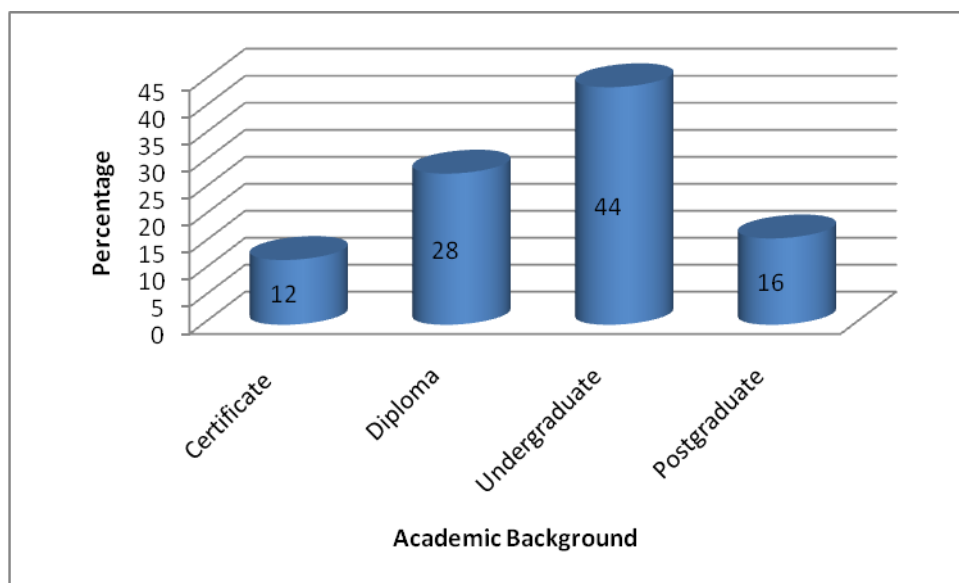


The results presented in figure 4.2 show that a large proportion of 54% of the respondents were aged from the ages of 30 to 40 years; this was followed by a significant percentage 25% that were aged from 20-30 years while 21% of the respondents were aged above 40 years. The age composition shows that most of the respondents were of the 30 to 40 years and therefore had rich experiences, could also appreciate the importance of the study.

4.2.3 Academic background

The respondents were asked to indicate their academic background. Figure 4.4 shows the study findings on the respondents academic background.

Figure4.4: Academic background



From the figure above, majority of the respondents 44% indicated they had undergraduate degree. This was followed by those who indicated they had a diploma 28%. 16% of the respondents indicated they had a postgraduate degree while 12% indicated they had attained a certificate. The findings indicate that majority of the respondents had attained their undergraduate studies and therefore were in a good position to respond effectively and give rich information to our study.

4.2.5 Length of service

The respondents were asked to indicate the number of years worked in the firm. Figure 4.5 below show the results of the study on length of service of the respondents

Figure 4.5: Length of service

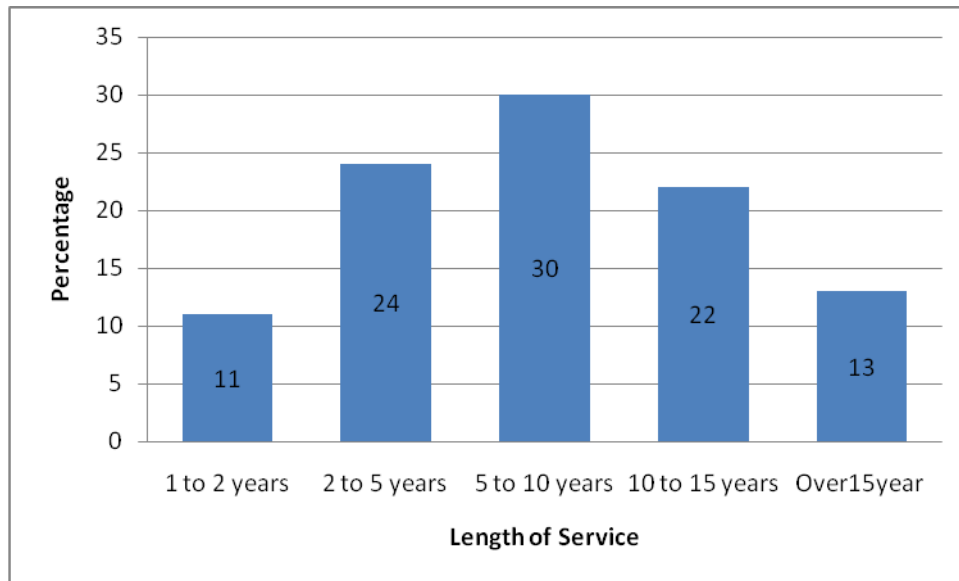


Figure 4.4 presents the findings on length of service of the respondents. From the figure, 30% indicated that they had been in the present firm for 5 to 10 years. 24% indicated a period of 2 to 5 years, 22% indicated a period of 10-15 years 13% indicated that they had worked for over 15 years, while 11% indicated a period of less than 3 years to 2 years. The study shows that majority of the respondents had worked for more than 5 years in the firm and therefore were in a position to respond efficiently to the study questions and appreciate the reason for our study.

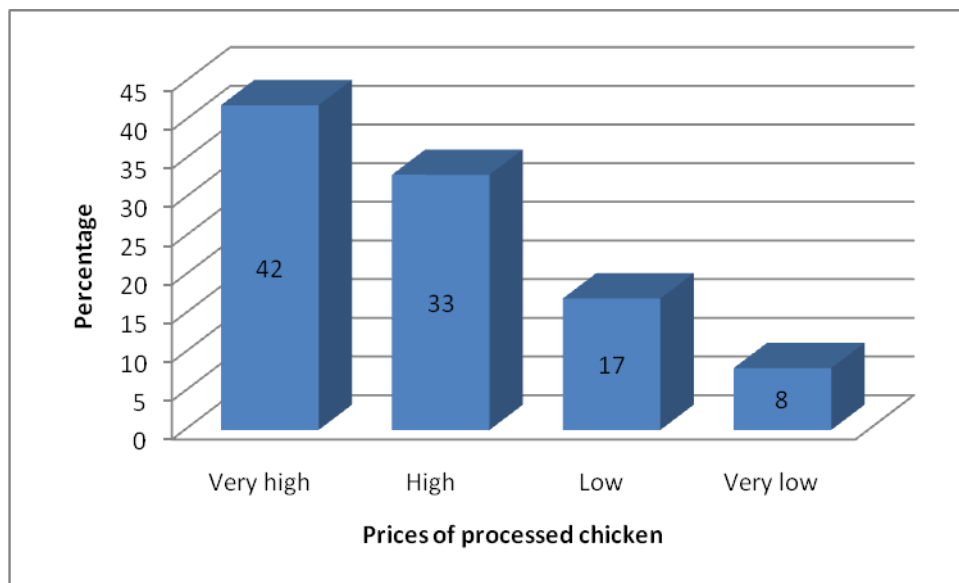
FACTORS AFFECTING UPTAKE OF PROCESSED CHICKEN MEAT

4.3 Price of Substitute Meats

4.3.1 Rating the Price of Processed Chicken

The respondents were asked to rate the prices of processed chicken. Figure 4.5 below shows the study finding on prices of processed chicken upon rating.

Figure 4.6: Rating the Price of Processed Chicken



The results show that 42% of the respondents indicated that prices of processed chicken were very high. 33% of the respondents indicated that prices of processed chicken were high, 17% of the respondents indicated that prices of processed chicken were low while 8% of the respondents indicated that prices of processed chicken were very low. The results show that majority indicated that Processed foods cost more in the market and common publics may find it non economical to pay the higher price as their daily food consume.

4.3.2 Attributes of processed chicken

The respondents were asked to indicate their level of agreement on whether consumers find that it is worth of value to buy processed food due to its unique attributes. Table 4.3 below shows the study finding on the attributes of processed chicken.

Table 4.3 : Attributes of processed chicken:

Ratings	Frequency	% Rate
Strongly agree	9	13
Agree	18	26
Neutral	4	6
Disagree	24	34
Strongly disagree	15	21
Total	70	100

The results show that majority of the respondents 34% disagreed on the statement that consumers find that it is worth of value to buy processed food due to its unique attributes. 26% agreed that consumer's find that it is worth of value to buy processed food due to its unique attributes. 21% strongly disagreed, 13% strongly agreed while 6% neither agreed nor disagreed.

4.3.3 Opinion on why Prices of processed chicken are very high

The respondents were asked to indicate why they think the Prices of processed chicken are very high. Table 4.4 below shows the study findings on the respondents opinion based on the prices of processed chicken.

Table 4.4: Opinion on Prices of processed chicken are very high

Factor	Frequency	% Rate
It has unique attributes	17	24
Packaging	13	19
High cost of processing	24	34
Freshness	16	23
Total	70	100

The results show that majority 34% of the respondents indicated that the prices of processed chicken are very high due to the high costs of processing the foods. This was followed by 24% of the respondents who indicated that the high costs of processed chicken was due to their unique attribute, 23% indicted it is because of their freshness while 19% indicated it was because of the packaging.

Others were on the opinion that high prices are due to the fact that processing sector is dependence on external resources in the supply of parent stock, feed raw materials (especially corn and soybean), vaccines-medicines, feed additives to a certain extent, and this situation affects the competition of the sector in foreign markets adversely as a result of increasing production costs

4.3.4 Price Factors

The respondents were asked to rate the following statements on price factors. Table 4.5 below shows the study finding on price factors that affect processed chicken.

Table 4.5: Price Factors

Description	N	Mode	Mean	Standard deviation
Processed foods cost more in the market and common publics may find it non economical to pay the higher price as their daily food consume	70	4	4.4029	0.6653
Processed chicken is an exorbitant range food	70	4	4.6658	0.8688
Consumers put less importance to the price when they shop for processed food	70	4	4.0517	0.7541
households on average have not shifted preferences to more processed chicken	70	4	4.2154	0.6857
Whole chicken, which is the least processed of all slaughtered cuts, is the most expensive	70	2	2.1357	0.6648

Respondents were asked to provide answers on each item that was measured by a five point Likert scale ranging from 1 (very low) to 5 (very high). From the table mode, mean and standard deviation were used to test respondent ideas where Standard deviation is the square root of the variance. It measures the spread of a set of observations. The larger the standard deviation is, the more spread out the observations are while mean is the arithmetic mean across the observations while mode is the number which appears most often.

From the results in the table 4.5, the results indicate that majority of the respondents were in agreement that price of related substitutes affected the uptake of processed chicken. This was shown by the majority who indicated that Processed foods cost more in the market and common publics may find it non economical to pay the higher price as their daily food consume with a mode of 4 and a mean of 4.4029. other factors such as Processed chicken is an exorbitant range food, Consumers put less importance to the price when they shop for processed food and households on average have not shifted preferences to more processed chicken were also indicated by majority with a mode of 4 and means of 4.6658, 4.0517 and

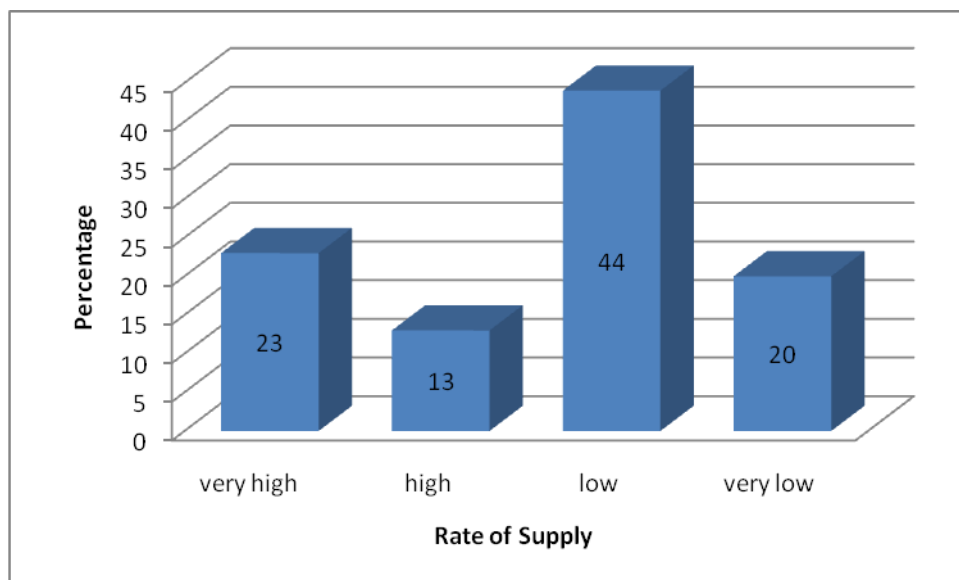
4.2154 respectfully. The results show that majority shown by a mode of 2 and a mean of 2.1357 indicated that whole chicken, which is the least processed of all slaughtered cuts, is the most expensive. The standard deviation show the spread of ideas of respondent and from the table the standard deviation ranges from 0.6648 to 0.8388 indicating that it is a small value thus respondents were agreeing to the same idea

4.4 Supply patterns

4.4.1 Rate of supply of processed chicken

The respondents were asked to rate the supply rate of processed chicken. Figure 4.7 below shows the study finding on the rate of supply of processed chicken

Figure4.7: Rate of supply of processed chicken



The results show that 44% of the respondents indicated that the supply rate of processed chicken was low 44%. This was followed by 23% of those who indicated that the supply rate was very high. 20% indicated that the supply rate was very low while 13% indicted the supply rate was high.

4.4.2 Factors that affect supply of processed chicken

The respondents were asked to rate the factors that affect supply of processed chicken. Table 4.6 below shows the study finding on factors that affect supply of processed chicken.

Table 4.6: Factors that affect supply of processed chicken

Description	N	Mode	Mean	Standard deviation
There is increased supply of processed chicken in the markets	70	2	2.1544	0.7548
There has been New Food Technologies Consumers now demand greater food variety and the availability of these foods year round	70	4	4.2651	0.3271
Technological innovations, as well as improved information and transportation technologies, have significantly changed the way food is produced, processed, transported and delivered to consumers	70	4	4.3257	0.4567
New technologies allow increased integration of various market activities and increased use of private contracting in global supply networks.	70	3	3.1779	0.8655

Respondents were asked to provide answers on each item that was measured by a five point Likert scale ranging from 1 (very low) to 5 (very high). From the table mode, mean and standard deviation were used to test respondent ideas where Standard deviation is the square root of the variance. It measures the spread of a set of observations. The larger the standard deviation is, the more spread out the observations are while mean is the arithmetic mean across the observations while mode is the number which appears most often. The results show that majority of the respondents agreed on the statement that Technological innovations, as well as improved information and transportation technologies, have significantly changed the way food is produced, processed, transported and delivered to consumers with a mode $m=4$ and a mean of 4.3257. There has been an New Food Technologies Consumers now demand greater food variety and the availability of these foods year round $m=4$ and mean of 4.2651 the respondents were neutral on the statement that New technologies allow increased integration of various market activities and increased use of private contracting in global supply networks where $m=3$ and a mean of 3.1779 continued to disagree on the statement that there is increased supply of processed chicken in the markets $m=2$ and a mean of 2.1544. This implies that supply of chicken is mainly affected by

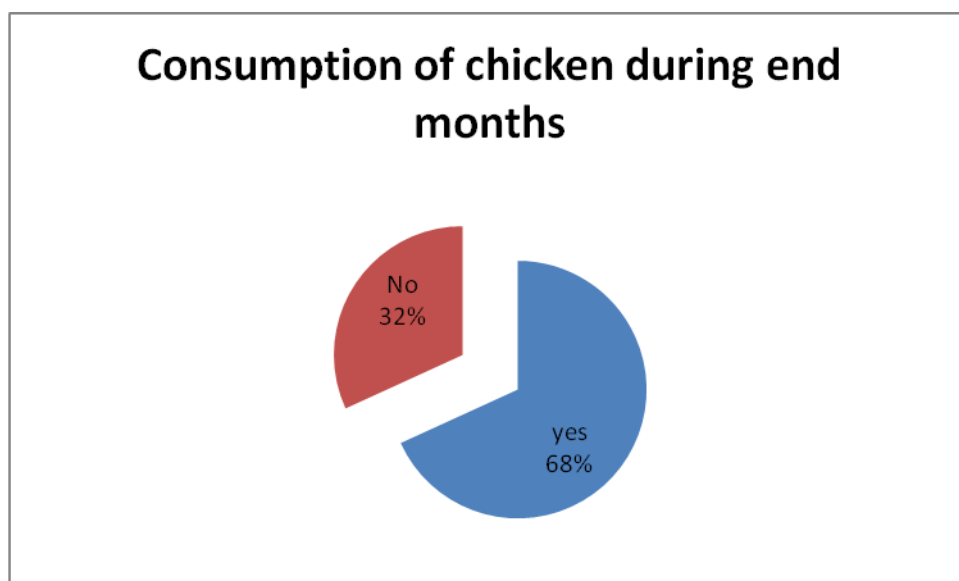
technology, and demand of the processed chicken. High demand of chicken will cause an increased supply while technology employed is what will results to higher production of processed chicken thus it will meet the needs of the consumers. The standard deviation show the spread of ideas of respondent and from the table the standard deviation ranges from 0.3271 to 0.8655 indicating that it is a small value thus respondents were agreeing to the same idea

4.5 Household Income

4.5.1 Consumption of chicken

The respondents were asked to indicate whether the consumption of chicken was high during end months. The figure 4.8 below shows the results on consumption of processed chicken during end months.

Figure 4.8: End month chicken consumption



The results show that majority of the respondents indicated that consumption of chicken was high during end months 68% while 32% indicated it was not high during end months.

4.5.2 Income factors

The respondents were asked to rate the factors on household income that affect the demand for processed chicken. Table 4.7 below shows the study finding on income factors that affect uptake of processed chicken.

Table 4.7: Household Income

Description	N	Mode	Mean	Standard deviation
At higher income levels, consumers begin to use their money to purchase products that satisfy preferences above and beyond basic nutritional needs	70	3	3.6524	0.8651
High-income consumers also begin to be concerned about the impact that individual food consumption decisions and choices	70	4	4.0625	0.3265
Lack of influence exerted by price and income on processed purchases appears to contradict each other	70	2	2.9741	0.5554
Most processed foods consumers are white, female, young, wealthy, and well-educated	70	2	2.3873	0.4124
Higher income households are more likely to purchase processed foods products	70	4	4.3651	0.8647

The results show that majority of the respondents were in agreement that higher income households are more likely to purchase processed foods products this was shown by majority who indicated with a mode of $m=4$ and a mean of 4.3651, High-income consumers also begin to be concerned about the impact that individual food consumption decisions and choices $m=4$ and a mean of 4.0625 and At higher income levels, consumers begin to use their money to purchase products that satisfy preferences above and beyond basic nutritional needs $m=3$ and a mean of 3.6524. The respondents were neutral on the statements Lack of influence exerted by price and income on processed purchases appears to contradict each other $m=2$ and a mean of 2.9741. The respondents also disagreed that most processed foods consumers are white, female, young, wealthy, and well-educated $m=2$ and a mean of 2.3873. This implies that household income affects the uptake of processed chicken. This is because at higher income, consumers tend to change their preference for food and they will mainly buy what they prefer and feel will satisfy their need. The standard deviation show the spread

of ideas of respondent and from the table the standard deviation ranges from 0.3265 to 0.8651 indicating that it is a small value thus respondents were agreeing to the same idea

4.6 Culture and Traditional Believes

The respondents were asked to rate the factors on Culture and Traditional Believes. Table 4.8 below shows the study finding on Culture and Traditional Believes factors that affect the uptake of processed chicken.

Table4.8 Culture and Traditional Believes

Description	N	Mode	Mean	Standard deviation
Culturally, meat is associated with wealth and consumption is viewed as a reflection of favourable economic conditions	70	4	4.6233	0.8101
Chicken was culturally viewed as female food	70	4	4.3215	0.3261
women view chicken more positively than men and therefore they tend to consume more chicken compared to consumption of chicken by men	70	4	4.1572	0.9517
Chicken fillets were perceived to be more convenient than whole chicken, as extensive cooking was not required	70	2	2.2658	0.5628
Different cultures may encourage or frown upon consumption of different foods by individuals who belong to their groups.	70	4	4.0325	0.9654
Chicken meat was also perceived as having “added value” in terms of health, being low in fat, in minimising waste and in terms of convenience	70	2	2.2653	0.4325

Respondents were asked to provide answers on each item that was measured by a five point Likert scale ranging from 1 (very low) to 5 (very high). From the table mode, mean and standard deviation were used to test respondent ideas where Standard deviation is the square root of the variance. It measures the spread of a set of observations. The larger the standard

deviation is, the more spread out the observations are while mean is the arithmetic mean across the observations while mode is the number which appears most often. The results show that the respondents strongly agreed that Culturally, meat is associated with wealth and consumption is viewed as a reflection of favourable economic conditions $m=4$ and a mean of 4.6233. The respondents agreed that Chicken was culturally viewed as female food $m=4$ and a mean of 4.3215, women view chicken more positively than men and therefore they tend to consume more chicken compared to consumption of chicken by men $m=4$, mean =4.1572 and Different cultures may encourage or frown upon consumption of different foods by individuals who belong to their groups $m=4$ mean =4.0325. the respondents disagreed that Chicken fillets were perceived to be more convenient than whole chicken, as extensive cooking was not required $m=2$, mean =2.2658 and Chicken meat was also perceived as having “added value” in terms of health, being low in fat, in minimizing waste and in terms of convenience $m=2$, mean = 2.2653. This implies that culture and traditional beliefs affect the consumption of processed chicken. The standard deviation show the spread of ideas of respondent and from the table the standard deviation ranges from 0.3261 to 0.9654 indicating that it is a small value thus respondents were agreeing to the same idea

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of findings as discussed in chapter four and interpretations of the data analysis, conclusions and recommendations based on the findings.

5.2 Summary of findings

The study main aim was to analyze factors affecting uptake of Processed Chicken in Nairobi County. This was achieved by looking at factors such as price of substitute meats, supply patterns of processed chicken, household income and culture and traditional believes. The factors were examined by using descriptive research design by collecting data from members of population who were workers of Kenchic LTD which is the largest provider of processed chicken products in East Africa. The study utilized a questionnaire to collect primary data. The questionnaire designed in the study comprised of two sections. The first section (A) included personal information designed to determine fundamental issues including the demographic characteristics of the respondent, while the section B is devoted to information on the factors affecting the uptake of processed chicken meat in Nairobi county. Data collected was presented in tables, figures and content delivery and highlighted the major findings. It was also presented sequentially according to the research questions of the study. Mean scores and standard deviations analyses were used to analyse the data collected. The raw data was coded, evaluated and tabulated and it clearly depicted the factors affecting uptake of processed chicken

The study targeted employees of Kenchic limited and was able o establish information in regards to their gender, age, academic background and duration of service. The bio data pointed at the respondents' appropriateness in answering the study questions. In regards to gender it was noted that majority of the workers in the chicken processing firm were male. On the age group the study noted that majority of those working in the firm were those aged 30 to 40 years and therefore had rich experiences and they appreciated the importance of the study. On academic background, the findings indicated that majority of the respondents had

attained their undergraduate studies and therefore were able to respond effectively by giving rich information to our study. On length of service, the findings shows that majority of the respondents had worked for more than 5 years in the firm and this added value to the study since the respondent were able to respond effectively to our study by giving rich information on the study.

Questions 1

How does the price of substitute meats to chicken affect the uptake of processed chicken in Nairobi County?

The following came out clearly as the answers to how price of substitute products affect the uptake of processed chicken. The price of a substitute substance affects the uptake of processed chicken. This was shown by the fact that majority of the respondents indicated that when an action becomes more costly, fewer people will choose it. An increase in the price of a product will make it more costly for buyers to purchase it, and therefore less will be purchased at the higher price. When the price of good increases, people will turn to substitutes and cut back on their purchases of the more expensive good. This explains why consumption of processed chicken has gone down. The study established that consumers indicated that the prices of processed chicken were very high and therefore consumption was very low. Processed foods cost more in the market and common publics may find it non economical to pay the higher price as their daily food consume. Consumers found whole chicken, which is the least processed of all slaughtered cuts, is the most expensive.

Question 2

To what extent does the supply pattern of processed chicken affect the uptake of processed chicken in Nairobi County?

The study established that Supply patterns affected the consumption of processed chicken. This was shown by the fact that majority of respondents indicated that whenever there is increased supply of processed chicken in the markets, then the consumption also goes up since the prices of the products also reduces. There has been an increase in New Food Technologies Consumers now demand greater food variety and the availability of these foods year round. The rapid growth of population, requirement of quality and quantity assurance in food supply, need for protein of animal origin, increasing consumer awareness and preferences in terms of healthy and balanced nutrition have brought the processed meat

sector to the situation of a large industry having a significant place in urban areas in Kenya. Technological innovations, as well as improved information and transportation technologies, have significantly changed the way food is produced, processed, transported and delivered to consumers.

Questions 3

To what extent does household income level affect the uptake of processed chicken in Nairobi County?

The following came out clearly as the answers to how household income level affects the uptake of processed chicken in Nairobi County. The study established that household income affects the uptake of processed chicken. This is because at higher income, consumers tend to change their preference for food and they will mainly buy what they prefer and feel will satisfy their need. Higher income households are more likely to purchase processed foods products. High-income consumers also begin to be concerned about the impact that individual food consumption decisions and choices while at higher income levels, consumers begin to use their money to purchase products that satisfy preferences above and beyond basic nutritional needs. Lack of influence exerted by price and income on processed purchases appears to contradict each other does not affect demand for processed chicken while processed foods consumers have been associated with white, female, young, wealthy, and well-educated.

Question 4

How does cultural and traditional believe affect uptake of processed chicken in Nairobi County?

The following came out clearly as the answers to how cultural and traditional believes affect uptake of processed chicken in Nairobi County. The study established that culture has a significant impact on consumption of processed chicken. Culturally, meat is associated with wealth and consumption is viewed as a reflection of favourable economic conditions. Due to culture women view chicken more positively than men and therefore they tend to consume more chicken compared to consumption of chicken by men. Different cultures may encourage or frown upon consumption of different foods by individuals who belong to their groups

5.3 Conclusions

The study established that consumers indicated that the prices of processed chicken were very high and therefore consumption was very low. Processed foods cost more in the market and common publics may find it non economical to pay the higher price as their daily food consume.

On supply patterns whenever there is increased supply of processed chicken in the markets, then the consumption also goes up since the prices of the products also reduces. Despite factors such as the demand reduction and sudden drops in chicken meat prices processed chicken meat production has made significant progress in recent years in quality, productivity and capacity.

On household income affects the uptake of processed chicken. This is because at higher income, consumers tend to change their preference for food and they will mainly buy what they prefer and feel will satisfy their need.

On culture and tradition, meat is associated with wealth and consumption is viewed as a reflection of favourable economic conditions. Different cultures may encourage or frown upon consumption of different foods by individuals who belong to their groups.

5.4 Recommendations

The study found that high prices of chicken affected consumption of processed chicken and therefore the study recommends the need to relook at the prices of processed chicken since the drop in consumption of processed chicken can be attributed to the high prices in the market.

Due to low supply of processed chicken consumption has also gone down. The study recommends effective measure to be taken on increasing supply of processed chicken. This can be done by installation of high technology that will enable a high production of processed chicken to meet the demand of the consumers

By comparing prices of substitute products the study noted that demand for chicken reduces due to their high prices as compared to prices of processed beef which is low. The study therefore recommends that there should be a review of prices of processed chicken. The prices should be placed at a competitive rate.

The study noted that culture affected the consumption of processed chicken as majority people prefer taking whole chicken since they believe it had all the nutrients they need. The study recommends training and also educating people on the benefits of taking processed chicken. The processed chicken is seen to be taken by majority of those who live in urban areas as compared to those in rural areas. Therefore people in the urban areas are the ones who need more of the training and education so that they can increase their consumption of processed chicken.

5.5 Suggestion for Further Studies

To make this research more meaningful to firms dealing with processed chicken the study recommends further research on the following.

- 1) Effects of beef availability on uptake of processed chicken
- 2) Effects of high prices on the uptake of processed chicken
- 3) To investigate whether technology employed on production of processed chicken has effects on uptake of processed chicken.

References

- Abdulai, A. and Aubert, D. (2004) “*A cross-section analysis of household demand for food and nutrients in Tanzania,*” *Agricultural Economics*, vol. 31, no. 1, pp. 67–79, 2004.
- Aberle, E., Forrest, Gerrard, E. Mills, H., Hedrick, M., Judge, and Merkel R., (2001). *Principles of Meat Science*. 4th ed. Kendall Hunt Publishing Company, Dubuque, Iowa.
- Ajayi, F. (2010). “*Nigerian indigenous chicken: a valuable genetic resource for meat and egg production,*” *Asian Journal of Poultry Science*, vol. 4, no. 4, pp. 164–172, 2010.
- Aklilu, H. A., Almekinders, C. J. and Udo, H. M. (2007). poultry consumption and marketing in relation to gender, religious festivals and market access. *Tropical Animal Health Production* 39 (3): 165–177.
- Alvarado, C. , and Owens C. (2006). *Poultry: Chemistry and Biochemistry*. Pages 31:1-31:14 in *Handbook of Food Science, Technology and Engineering*. Y. H. Hui, ed. CRC Press, Taylor & Francis, Boca Raton, FL.
- Babicz-Zielinska, E. (1999). Food preferences among the Polish young adults. *Food Quality and Preference* 10 (2): 139-145.
- Bilgili, S. (2002). *Poultry meat processing and marketing - what does the future hold*. *Poult. Int.* 40:12-22.
- Bingham, S. (1996), “*Epidemiology and mechanisms relating diet to risk of colorectal cancer*”, *Nutrition Research Reviews*, Vol. 9, pp. 197-239.
- Borchert, L. L. (1998). *Poultry meat quality - its impact on processed meat products*. Pages 89-91 in *Proc. 47th Ann. National Breeders Roundtable*. St. Louis, Missouri.
- Candel, M.J. (2001), “*Consumers’ convenience orientation towards meal preparation: conceptualization and measurement*”, *Appetite*, Vol. 36, pp. 15-28.
- Caraher, M., Dixon, P., Lang, T. and Carr-Hill, R. (1999), “*The state of cooking in England: the relationship of cooking skills to food choice*”, *British Food Journal*, Vol. 101 No. 8, pp. 590-609.

- Caswell, J.A., Bredahl, M.E. and Hooker, N.H. (1998), “*How quality management metasystems are affecting the food industry*”, *Review of Agricultural Economics*, Vol. 20, pp. 547-57.
- Catley, A. (2008) “*The growing demand for livestock. Will policy and institutional changes benefit poor people?*” *ID21 Insights*, vol. 72, pp. 1–2.
- Chamul, R. (2007). *Quality measurements in beef. Pages 341-355 in Handbook of Meat, Poultry and Seafood Quality. M. L. N. Leo, and T. Boylston, eds. Blackwell Publishing, Victoria, Australia.*
- Chantylew D, and Belete, A (1997). “*A statistical analysis of demand for beef, mutton/ goat, pork and chicken in kenya, 1961– 1991,*” *Agrekon*, vol. 36, pp. 1–11, 1997.
- Costales A, and Pica-Ciamarra, B and Otte, J (2007) “*Livestock in a changing landscape: social consequences for mixed crop-livestock production systems in developing countries,*” *Research Report. Ref: 07–05, Pro-Poor Livestock Policy Initiative. A Living from Livestock.*
- Deaton A and Muellbauer, J (1980). “*An almost ideal demand system,*” *The American Economic Review*, vol. 70, pp. 312–326.
- Dong, A., Lee, J. and Shin, H.-S. (2011). Influence of natural food ingredients on the formation of heterocyclic amines in fried beef patties and chicken breasts. *Food Science and Biotechnology* 20 (2): 359-365.
- Fagerli, R. and Wandel, M. (1999), “*Gender differences in opinions and practices with regard to a ‘healthy diet’*”, *Appetite*, Vol. 32 No. 2, pp. 171-90.
- Falmoir, J., Mugny, G. and Perez, J. (2000), “*Social influence and social identity*”, in Terry, D.J. and Hogg, M.A. (Eds), *Attitudes, Behaviours and Social Context*, LEA, London, pp. 245-64.
- Ford, G. T., Darlene, B. S. and John, L. S. (1990). Consumer skepticism of advertising claims: Testing hypothesis from economics of information. *Journal of Consumer Research* 16: 433-441.
- Frewer, L., Howard, C. and Shepherd, R. (1995), “*Consumer perceptions of food risks*”, *Food Science and Technology Today*, Vol. 9 No. 4, pp. 212-16.

- Furey, S. (2000), “*Cooking skills a diminishing art?*”, *Nutrition and Food Science*, Vol. 30, pp. 263-6.
- Glanz ,K., Basil, M., Maibach, E., Goldberg, J. and Snyder, D. (1998). Why Americans eat what they do: taste, nutrition, cost, convenience, and weight control concerns as influences on food consumption. *Journal of the American Dietetic Association* 98 (10): 1118-26.
- Grunert, K. (1997). What’s in a steak? A cross-cultural study on the quality perception of beef. *Food Quality and Preference* 8 (3): 157–174.
- Grunert, K. (1997), “*What’s in a steak? a cross-cultural study on the quality perception of beef*”, *Food Quality and Preference*, Vol. 8 No. 3, pp. 157-74.
- Guerrero-Legarreta, I. and Hui, Y. H. (2010). *Processed Poultry Product*. Handbook of Poultry Science and Technology , Wiley.
- Gueye, E. (2003) “*Production and consumption trend in Africa,*” *World Poultry*, vol. 19, pp. 12 14, 2003.
- Hazell, P (2007) “*All-Africa review of experiences with commercial agriculture: case study on livestock,*” 2007, [http://siteresources.worldbank.org/INTAFRICA/Resources/257994- 1215457178567/Ch11 Livestock.pdf](http://siteresources.worldbank.org/INTAFRICA/Resources/257994-1215457178567/Ch11_Livestock.pdf).
- Henning, J., Khin, A., Hla, T. and Meers, J. (2006). Husbandry and trade of indigenous chickens in Myanmar—Results of a participatory rural appraisal in the Yangon and the Mandalay divisions. *Tropical Animal Health Production* 38 (7-8): 611–618
- Holm, L. and Møhl, M. (2000), “*The role of meat in everyday food culture: an analysis of an interview study in Copenhagen*”, *Appetite*, Vol. 34, pp. 277-83.
- Islam A, and Nishibori, M (2009).“*Indigenous naked neck chicken: a valuable genetic resource for Bangladesh,*” *World’s Poultry Science Journal*, vol. 65, no. 1, pp. 125–138.
- Kennedy, O. B., Stewart-Knox, B. J., Mitchell, P. C. and Thurnham, D. I. (2004). Consumer perceptions of poultry meat: a qualitative analysis. *Nutrition and Food Science* 34 (3): 122–129.

- Kubberød, E., Ueland, O., Tronstad, A. and Risvik, E. (2002), “*Attitudes towards meat and meat-eating among adolescents in Norway: a qualitative study*”, *Appetite*, Vol. 38 No. 1, pp. 53-62.
- Lea, E. and Worsley, A. (2001), “*Influences on meat consumption in Australia*”, *Appetite*, Vol. 36 No. 2, pp. 127-36.
- Lin, Biing-Hwan, Jayachandran N. Variyan, Jane Allshouse, and John Cromartie. 2003. *Food and Agricultural Commodity Consumption in the USA*.
- Martinez, Steven W., and Kelly Zering. 2004. *Pork Quality and the Role of Market Organization*. U.S. Dept. of Agriculture, Economic Research Service, AER-835. Nov.
- McBride, W.D., and Nigel Key. 2003. *Economic and Structural Relationships in U.S. Hog Production*. U.S. Dept. of Agriculture, Economic Research Service, AER-818. Feb.
- McCarthy, S. O'Reilly, L. Cotter, B. and M. De Boer, (2004) “*Factors influencing consumption of pork and poultry in the Irish market*,” *Appetite*, vol. 43, no. 1, pp. 19–28.
- Miles, S. and Frewer, L.J. (2001), “*Investigating specific concerns about different food hazards*”, *Food Quality and Preference*, Vol. 12, pp. 47-61.
- Min, H. and Min, H. (2011). Benchmarking the service quality of fast-food restaurant franchises in the USA: A longitudinal study. *Benchmarking: An International Journal* 18 (2): 282-300.
- Mitchell, J. (1999), “*The British main meal in the 1990s: has it changed its identity?*”, *British Food Journal*, Vol. 101 No. 11, pp. 871-83.
- Mugenda M, (2003), *Research Methods, Qualitative & Quantitative*, Nairobi, Kenya, African Centre for Technology Studies (ACTS).
- Nestle, M. (1999), “*Meat of wheat for the next millennium*”, *Proceedings of the Nutrition Society*, Vol. 58, pp. 211-18.
- Oliphant, G. G. 1997. *Meat and meat products*. Pages 1-46 in *Food Industries Manual*. 24th ed. M. D. Ranken, Kill, R. C., and C. G. J. Baker, eds. Chapman and Hall, London, UK.

- Ollinger, M., J. MacDonald, and M. Madison, 2000. *Structural Change in U.S. Chicken and Turkey Slaughter. Agricultural Economic Report No. 787. Economic Research Service. U.S. Department of Agriculture, Washington, D.C.*
- Olson, J.C. and Jacoby, J. (2000), “*Cue utilisation in the quality perception process*”, *Proceedings of the 3rd Annual*
- Ostovar, K., J. H. MacNeil, and K. O'Donnell. 1971. *Poultry product quality: Microbiological evaluation of mechanically deboned poultry meat. J. Food Sci. 36:1005-1007.*
- Singh, P. and Goyal, G. K. (2011). Functionality of Pizza Ingredients. *British Food Journal* 113 (11): 1-23.
- Trindade, M. A., P. E. Felicio, and C. J. C. Castillo. 2004. *Mechanically separated meat of broiler breeder and white layer spent hens. Sci. Agric. 61:234-239.*
- Verbeke, W. and Viane, J. (1999), “*Beliefs, attitude and behaviour towards fresh meat consumption in Belgium; empirical evidence from a consumer study*”, *Food Quality and Preference, Vol. 10, pp. 437-45.*
- WCRF (1997), *Food, Nutrition and the Prevention of Cancer: A Global Perspective, World Cancer Research Fund and the American Institute of Cancer Research, Washington DC.*

APPENDIX

Appendix I: Questionnaire

This questionnaire is to collect data for purely academic purposes. All information will be treated with strict confidence. Do not put any name or identification on this questionnaire. *Answer all questions as indicated by either filling in the blank or ticking the option that applies.*

SECTION A: PERSONAL INFORMATION

- 1) What is your gender? (tick one)
Male ☐ Female ☐
- 2) Age(tick one)
20 ☐ 20 to 30 ☐ 30 to 40 ☐ 40 and above ☐
- 3) What is your academic background
Certificate ☐ diploma ☐ undergraduate ☐ postgraduate ☐
- 4) How long have you been working in your present capacity?
Less than 3 years ☐ 3 to 5 years ☐ 5 to 7 years ☐ Over 7 years ☐
- 5) How long have you worked for the industry?
1 to 2 years ☐ 5 to 10 years ☐ Over 15 years ☐
2 to 5 years ☐ 10 to 15 years ☐

PART B: FACTORS AFFECTING UPTAKE OF PROCESSED CHICKEN MEAT

Price of Substitute Meats

- 6) How would you rate the price of processed chicken?
 - a) Very high
 - b) High
 - c) Low
 - d) Very low
- 7) Do you agree that consumers find that it is worth of value to buy processed food due to its unique attributes
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree

8) Why do you think prices of processed chicken are very high?

.....

9) To what extent do you agree with following price factors that affect the consumption of processed chicken.

	Strongly disagree	disagree	neutral	agree	Strongly disagree
Processed foods cost more in the market and common publics may find it non economical to pay the higher price as their daily food consume					
Processed chicken is an exorbitant range food					
Consumers put less importance to the price when they shop for processed food					
households on average have not shifted preferences to more processed chicken					
Whole chicken, which is the least processed of all slaughtered cuts, is the most expensive					

Supply patterns

10. How would you rate the supply rate of processed chicken in Nairobi

a. very high b. high c. low d. very low

11. To what extent do you agree with following supply factors that affect the consumption of processed chicken

	Strongly disagree	disagree	neutral	agree	Strongly disagree
There is increased supply of processed chicken in the markets					
<i>There has been an New Food Technologies</i> Consumers now demand greater food variety and the availability of these foods year round					
Technological innovations, as well as improved information and transportation technologies, have significantly changed the way food is produced, processed, transported and delivered to consumers					
New technologies allow increased integration of various market activities and increased use of private contracting in global supply networks.					

Household Income

12. Do you agree that majority of processed chicken is consumed during end months when majority of people have received their salary

a) Yes b) no

13. To what extent do you agree with following Income factors that affect the consumption of processed chicken

	Strongly disagree	disagree	neutral	agree	Strongly disagree

At higher income levels, consumers begin to use their money to purchase products that satisfy preferences above and beyond basic nutritional needs					
High-income consumers also begin to be concerned about the impact that individual food consumption decisions and choices					
Lack of influence exerted by price and income on processed purchases appears to contradict each other					
most processed foods consumers are white, female, young, wealthy, and well-educated					
higher income households are more likely to purchase processed foods products					

Culture and Traditional Believes

14. To what extent do you agree with following culture factors that affect the consumption of processed chicken

	Strongly disagree	disagree	neutral	agree	Strongly disagree
Culturally, meat is associated with wealth and consumption is viewed as a reflection of favourable economic conditions					
Chicken was culturally viewed as female food					
women view chicken more positively than men and therefore they tend to consume more chicken compared to consumption of chicken by men					
Chicken fillets were perceived to be more convenient than whole chicken, as extensive cooking was not required					
Different cultures may encourage or frown upon					

consumption of different foods by individuals who belong to their groups.					
Chicken meat was also perceived as having “added value” in terms of health, being low in fat, in minimising waste and in terms of convenience					

Appendix II: Work Schedule

YEAR	MONTH	ACTIVITY
2013	February	Sharpening the focus of the study and research design.
2013	February	Review of the related Literature.
2013	February	Proposal Drafts and Revision
2013	March	Writing and typing of the proposal for Submission.
2013	March	Presentation of the departmental and faculty postgraduate committees.
2013	March	Defense of the proposal. Correction and submission of the proposal.
2013	April/May/June	Field Work/Data collection
2013	July/August	Data Analysis and presentation
2013	September/October	Writing and Typing of Thesis Summary Conclusion and recommendations
2013	November	Defense of the Thesis. Correction and submission of the Final Bound Copies

Appendix III: Budget

<u>ACTIVITY/ ITEM</u>	<u>QUANTITY</u>	<u>COST (Kshs)</u>
Stationery		
a) Foolscaps (ruled)	1 ream @ 250/=	250.00
b) Field Notebooks	2 @ 30/=	60.00
Typing		
a) Proposal	50 pages @ 20/=	1,000.00
b) Thesis	150 pages @ 30/=	4,500.00
Photocopying		
a) Proposal	8 copies @ 5/=	2,000.00
b) thesis	8 copies @ 5/=	6,000.00
Biding		
a) Proposal	8 copies @ 70/=	560
b) Thesis	8 copies @ 250/=	2,000.00
Transport		
Cost of travelling	33 days @ 273/=	9,000.00
Subsistence		
a) Cost of meals (lunch+ breakfast)	33 days @ 300/=	9,900.00
b) Supper for four nights	4 nights @ 250/=	1000.00
Accommodation		
a) Four nights (cost of accommodation for four nights)	4 nights @ 500/=	2000.00
Computer Time		
Data processing using computer		10,000.00
Contingencies		
Estimated @ 10% of the total cost		4827.00
TOTAL		53,097.00